



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,579	12/22/2003	Chris L. Sagar		7990

7590
Arthur W. Fisher, III
Suite 316
5553 West Waters Avenue
Tampa, FL 33634

07/25/2007

EXAMINER

JOYNER, KEVIN

ART UNIT	PAPER NUMBER
----------	--------------

1744

MAIL DATE	DELIVERY MODE
-----------	---------------

07/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/743,579

Applicant(s)

SAGAR, CHRIS L.

Examiner

Kevin C. Joyner

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 4 recites the limitation "the air handler" in line 7. There is insufficient antecedent basis for this limitation in the claim. The Office suggests the Applicant to amend to, "an air handler."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 and 9-18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dillenback (U.S. Publication No. 2003/0230091).

Dillenback discloses a chemical dispensing apparatus for use with an air conditioning or heating system to reduce airborne contaminants from the air stream of a conditioned space comprising a chemical supply section including a chemical reservoir

Art Unit: 1744

(paragraphs 23 and 24) and a chemical delivery device to store and supply chemicals to the contaminated air stream and a dispensing control section (paragraph 24) including a microprocessor control (50) to selectively control the dispensing of chemicals to the contaminated air stream as shown in Figure 1 and disclosed in paragraphs 22-25.

Regarding claim 2, the reservoir comprises a chemical storage container (35a, 35b, and 35c) and chemical feed controls (36a, 36b, and 36c) as disclosed in paragraph 24.

Concerning claim 3, the reference continues to disclose that the delivery section comprises a chemical dispensing device (16), which is an atomizing nozzle (concerning claim 5; paragraph 17), coupled to said chemical storage container (35a, 35b, and 35c) by a chemical supply conduit through a chemical flow control (38) as shown in Figure 1.

Regarding claim 4, the chemical flow control comprises a normally closed control valve (38) selectively movable between an open position and a closed position coupled to said dispensing control section (50) by a conductor (38a) to receive actuating signals therefrom to selectively move from said normally closed position to said open position as disclosed in paragraph 24. More specifically, the dispensing valve is a normally closed flow control valve that is operable between an open and closed position. As disclosed in paragraphs 32 and 33 the system is set on cycles wherein the device is only in operation during a set time wherein the dispensing valve is opened and the dispenser is actuated for a time period determined by certain parameters. Thus, the reference discloses that the valve is normally closed and is only opened during operation.

Art Unit: 1744

Regarding claim 9, Dillenback also discloses that the dispensing control section comprises a microprocessor control device (50) including a display (100) to provide a visual display of the system status. Regarding claims 10-17, the microprocessor control device of Dillenback is fully capable of performing each of the limitations in the respective claims. More specifically, the device is capable of having an up control key and a down control key (as shown in Figure 1), and is fully capable of monitoring and recording the operation of said chemical dispensing apparatus as well as the consumption of the chemicals using dispensing rate calculations by the sensors (concerning claim 16; numerals 21, 23, and 25 as well as 39a, 39b, and 39c) in the reservoirs and in the HVAC system. The device is also fully capable of controlling the operating cycle by the frequency of application and duration of dispensing the chemical as well as displaying the chemical in the reservoir on the visual display as disclosed in paragraphs 27-32. Regarding claim 18, the apparatus is also capable of manually dispensing the chemical by pressing a program mode key and then pressing a manual injection key (paragraph 28).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1744

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dillenback (U.S. Publication No. 2002/0116937) in view of Edwards (U.S. Patent No. 3,967,466).

Dillenback is relied upon as set forth above. Dillenback does not appear to disclose that the chemical feed control is a check valve. Edwards discloses an air conditioning system that provides a fluid in the form of a spray to supersaturate the gas throughout the system (column 1, lines 40-50). The reference continues to disclose that the system provides a spray nozzle (92b) controlled by a check valve (147) in order to prevent fluids from flowing in an unwanted direction (column 12, lines 5-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Dillenback to utilize a check valve as the dispensing valve in order to prevent fluids from flowing in an unwanted direction as exemplified by Edwards. Regarding claim 7, Dillenback continues to disclose that the apparatus comprises a blower control (50) capable of receiving control or actuating signals to selectively actuate or energize a blower (10) when a chemical is dispensed from said chemical storage container (paragraph 19).

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dillenback (U.S. Publication No. 2002/0116937) in view of Edwards (U.S. Patent No. 3,967,466) as applied to claims 6 and 7 above, and further in view of Ogden (U.S. Patent No. 4,580,309).

Dillenback in view of Edwards is relied upon as set forth in reference to claims 6 and 7 above. Dillenback does not appear to disclose that the blower control includes a

Art Unit: 1744

transformer and a blower control relay box. However, it is conventionally well known in the art to utilize a relay box and transformer with fans and blowers in order to transfer electric energy from one set of circuits to another. Ogden discloses an example of this in a multifunctional cleaning system that utilizes a blower. The reference discloses in columns 10 & 11, lines 60-68 & 1-25 respectively that a set of blowers are controlled by a control device comprising a plurality of transformers and relay boxes in order to adequately and effectively provide power to the blowers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Dillenback to include a transformer and a blower control relay box in the blower control, as such are conventionally known items that are utilized with blowers in order to transfer adequate and effective power to the blower as exemplified by Ogden.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin C. Joyner whose telephone number is (571) 272-2709. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 1744

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should


you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCJ



GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER